USAWC STRATEGY RESEARCH PROJECT

CHINESE OIL DEPENDENCE: OPPORTUNITIES AND CHALLENGES

by

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ABSTRACT

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China's dependence on foreign energy sources to fuel its economic growth represents a new influence on her national strategy. Prior to 1993 China was self sufficient in oil production. By 2000 she was importing one million barrels of oil per day, this represented one quarter of her petroleum needs. China is projected to be importing eight million barrels per day by 2020, this will represent 75% of her oil requirement. Like Japan in the 1930's, a disruption in China's supply of oil; either through events unrelated to Chinese growth, or contrived to slow the spread of her power in east Asia; would be viewed by China as a threat to her security and could precipitate a decisive response, potentially involving armed conflict. Understanding why oil is so critical to China's national security and what China may do to secure sources of oil in the future will contribute to the western pacific security strategy of the United States. The purpose of this paper is to analyze how oil dependence is shaping China's security strategy, identify recent steps China has taken to ensure her continued access to oil, and recommend actions the United States should take in light of China's new dependence on foreign oil.



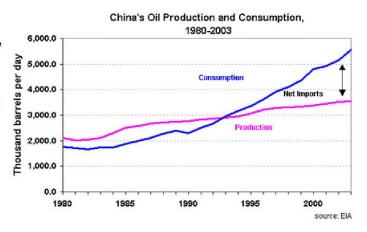
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CHINESE OIL DEPENDENCE: OPPORTUNITIES AND CHALLENGES

China's dependence on foreign energy sources to fuel her economic growth represents a new influence on her national strategy. Prior to 1993 China was self sufficient in oil production. By 2000 she was importing one million barrels of oil per day, this represented one quarter of her petroleum needs. China is projected to be importing eight million barrels per day by the year



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CHINA'S OIL DEPENDENCE

China's consumption of oil has rapidly increased since 1990, far outpacing the development of domestic sources. Economic growth and increasing oil consumption follow generally parallel paths. China's gross domestic product grew by an average of 8 percent from 1999 to 2003² while oil consumption grew an average of 7.5 percent during the same period. Projections estimate that China's oil consumption will grow to 11 million barrels-per-day by 2020, largely due to growth in transportation sector. Proof of continued growth in this area manifests itself in the level of current and future road and auto construction. China ranks second in the world in auto expressway mileage and third in the world in total road mileage, having laid

down one point eight million kilometers of pavement. This trend is accelerating. Forty-four percent of this road and highway construction has been accomplished after 1990.⁵ Growth of the Chinese highway system will continue at a rapid pace for at least the next three years, the industrial and commercial bank of china announced in the summer of 2001 it would finance 100 billion yuan (twelve million U.S. dollars) in road construction projects over the next five years which, according to the bank, makes "a great contribution to the state's economic development."

China is quickly filling these new roads and highways with cars and trucks. Four point four million automobiles were sold in China in 2003. The Chinese Auto Association estimates sales will top five million this year and growth could take off next year as China meets its world trade organization obligation to lift import quotas and cuts tariffs on automobile imports from thirty-five to thirty percent.⁷

There is no indication that China's oil needs will ever be satisfied by domestic supplies again. China's proven reserves have declined over the past ten years to the point that current Chinese production levels (which only cover two-thirds of her needs today) would exhaust her domestic supply in thirty years. China's domestic production is limited by oil field recovery capacity, not refinery capacity. China has shut down many of her smaller refineries due to over capacity in that sector. As a result, it is not physically possible for China to satisfy her oil needs domestically. Over one-third of China's oil imports come from the middle east, another quarter come from south Asia (Indonesia, Malaysia, Brunei, etc.), the remaining imports largely come from Africa and the former Soviet Republics.

OIL AND CHINA'S NATIONAL SECURITY

"The massacre in Tiananmen Square was an event full of great ironies. Deng Xiaoping, the chief target of the demonstrators' anger, had once been hailed as a pioneering reformer whose bold economic programs.... improved the living standards of ordinary Chinese, and sparked a growing prosperity in the economy." China's new found economic prosperity and its resultant thirst for oil to fuel this economic engine, places the ruling Chinese Communist Party in a situation that Thomas Jefferson articulated two hundred years ago. "We have the wolf by the ears and we can neither hold him, nor safely let him go." The population, particularly in the urban centers of China, has come to expect prosperity and will not tolerate a government viewed as responsible for an economic recession. As one popular Chinese magazine publisher put it "These days, no one can persuade the Chinese people to trade their search for a better life with a political cause." Additionally, the crackdown on the Tiananmen Square protesters

was not easily accomplished. The commander of the 38th Army Group was initially called on to put down the demonstration. He refused to lead his unit against the protesters despite threats of court martial. The Chinese Communist Party (CCP) then went to great lengths bringing Peoples Liberation Army units in from across the country to prevent any one unit being given the responsibility and potentially refusing to act. 15 Clearly the CCP does not wish to go through another wave of instability and has worked hard to prevent widespread discontent among its citizens. The issues that led to the unrest in 1989 were largely domestic problems involving poor monetary policy and government corruption. What has changed from the issues that led to Tiananmen Square demonstrations is that now there are factors external to China that could lead to such an economic slowdown and, potentially, civil unrest. One of the most critical economic factors that could lead to civil unrest is the supply of oil.

Another issue that makes the CCP even more attuned to maintaining the level of economic growth is the growing popular opinion throughout China that the government has an impact on citizen's daily lives. A Chinese government survey taken in 1990 and again in 2000 indicated that the number of people who felt the national government had an impact on their lives grew from twenty-one percent to sixty-eight percent, and in urban centers that percentage has climbed to seventy-five percent.¹⁷

Given that the CCP emphasizes economic prosperity as a pillar of party policy, that the people recognize that the government plays a significant role in their daily lives, and the people have no institutional means of changing unpopular government action. The CCP must be very sensitive to any issue that could have a detrimental effect on economic growth. Therefore a significant driver of China's national security strategy is a reliable source of relatively cheap oil.

CHINESE OIL SOURCES

China's sources of foreign oil have evolved over time. Initial oil imports to China were satisfied by regional sources of oil from countries such as Indonesia and Brunei. However, China's percentage of the world oil demand has been steadily increasing. It grew from two to six percent from 1971 to 1997 and is anticipated to reach ten percent by 2020. To meet this growing demand for oil Chinese imports have increasingly come from the Middle East, and future growth in Chinese oil imports are expected to be covered by Middle East sources. In addition to Middle East oil, China is interested in a largely undeveloped oil field beneath an island chain in the South China Sea known as the Spratly Islands.

THE MIDDLE EAST OIL SUPPLY ROUTE

There are no pipelines connecting China with Middle East oil sources. In order to reach China from the Middle East, oil must be transported by ship and the most direct route to China is through the Strait of Malacca.

This geographic chokepoint is the gateway between the Indian Ocean and the Pacific Ocean, it is roughly bordered by the southern tip of Malaysia (where city-state of Singapore is located) and the north coast of Australia, between Singapore and Australia is a large archipelago, mostly controlled by the country of Indonesia. A closure of the strait would force any ship cruising at the standard speed of fifteen knots to make a two week detour around the continent of Australia to get from the Indian to Pacific Ocean. The cost in fuel alone for a super tanker to make this detour is over \$1 Million. The Strait of Malacca has been critical to global trade since Arab traders established routes with East Asia in the 8th century AD. Its importance was accentuated by the building of the Suez Canal in the 19th century, which allowed easy sea transport from markets in Asia directly to Europe. The strait became indispensable in the 20th century with the establishment of oil as the energy source of choice by all industrialized societies around the globe. This was initially due to the large sources of oil in what was then the Dutch East Indies (modern day Indonesia) and later as a route between the Middle East and Asia and the western United States. By 1993 the strait was handling over 8,800 vessel transits per year, this represented over one third of the entire ocean going cargo ship fleet in the world.²⁰ Included in that number were over 2,200 super tanker transits going to or from the Middle East.21

STRAIT OF MALACCA SECURITY ENVIRONMENT

The Strait of Malacca presents both challenges and opportunities for Sino/U.S. relations. This commerce route is unique in that that it is a security concern for both China and the United States. Thus, any threat to it which may be directed against the United States will necessarily affect China. Similarly, any threat against Chinese interests in the region could impact the U.S. as well.

Singapore is a well developed nation in all respects, with a high regard for the rule of law and a government largely free of corruption. Singapore is the most stable power in the region.

Indonesia, in contrast has all the qualities that would allow extremist terrorist groups to flourish; a weak central government that does not effectively administer the rule of law and a loosely regulated financial system that can covertly fund extremist group activity. ²² Indonesia also has ongoing ethnic tension that recently manifested itself during the East Timor crisis. The

physical security of Indonesia is extremely challenging as well. According to the Central Intelligence Agency fact book, Indonesia has a border made up of 17,000 islands, only 6,000 of which are inhabited. These islands collectively present a 54,000 kilometer coastline. All of these factors are identified in the U.S. National Strategy for Combating Terrorism as key underlying conditions that make Indonesia a fertile environment where terrorist groups can hide, train, and gain easy access to western economic targets, especially one of the flagship issues for Middle East terrorism, the exploitation of oil by the industrialized world. The current situation in Indonesia has resulted in an explosion of terrorist violence against western targets. There have been nine terrorist bombings in Indonesia since 1999 most famously the October 2002 bombing in Bali that left 202 people (mostly Australian tourists) dead.²³

Malaysia is similar to Indonesia in that it has a less centralized government and the rule of law is not as well defined as it is in Singapore. Like Indonesia, Malaysia has had to contend with various terrorist groups such as the Kumpulan Mujahidin Malaysia.

While there does not appear to be a conscious effort by any group to attack Chinese interests in the Strait of Malacca, actions by terrorists could cause serious economic problems for China. The unintended consequence of attacking United States and western interests could have two very different effects. A threat could draw China into a closer relationship with the United States, if China recognizes her common interest in regional security. On the other hand, it could create a conflict between the two countries as each side attempts to assert positive control over the security environment of the area. China could interpret increased security initiatives by the United States as an attempt to dominate the region.

Recent activity by the United States in Southeast Asia has fueled China's suspicion that the United States may be attempting to dominate the region's security environment. Specifically there has been an increase in United States military presence in the region over recent years. The U.S. Department of Defense has significantly increased its ties with the defense organizations surrounding the Strait of Malacca, with U.S. Pacific Command now sponsoring and participating in two recurring, naval exercises that involve Singapore, Indonesia or Malaysia. The most significant, the mine countermeasures and diving exercise, held its inaugural event in June of 2001, focuses on countering mine and undersea explosive threats to the Strait of Malacca. One other exercise, Cooperation Afloat Readiness and Training (CARAT), is a semi-annual exercise that has been held for decades. In the past, the CARAT exercise was limited to one or two U.S. ships and the exercise focused on humanitarian assistance and amphibious operations. This exercise has grown significantly in scope and security relevance over the past few years. American participation in the recently completed CARAT 2004 included

an amphibious ship, coast guard cutter, and two destroyers. The other participants (including Indonesia, Malaysia and Singapore) conducted exercises relating to anti-terrorism, visit board and search ship procedures, and small target gunnery practice. One other structured military to military interaction in the region is the bi-annual Western Pacific Naval Symposium, last held in October 2002 and involving 17 other nations including Indonesia and Malaysia. Although security of the Strait of Malacca is not the specific reason for the conference, this issue most likely figured as a prominent topic. Finally, Singapore recently completed its new Changi Naval Base with a deep draft pier large enough to berth an American aircraft carrier and Singapore publicly announced the pier would be available for use by the U.S. Navy. ²⁴ In March of 2001 the USS Kitty Hawk was the first American carrier to visit to the base.

China has been attempting to counter perceived U.S. hegemony in the region since the late nineties. A 1998 Peoples Liberation Army whitepaper, *China's National Defense* introduced a new policy known as the "New Concept of Security" which was aimed at increasing Chinese influence in Southeast Asia, and countering the United States strengthening of military alliances around the globe.²⁵ The policy has been largely a failure for many reasons and the recent U.S. initiatives listed above have not been looked upon favorably by China. A recent China News Service article noted that "the focus and emphasis of America's forces have shifted to East Asia." China's current President Hu Jintao commented in 2004 that "the 'Malacca dilemma' is a key element to China's energy security" and "certain powers (the United States) have all along encroached on and tried to control the navigation through the strait."

CHINA'S MIDDLE EAST SECURITY STRATEGY

China is a relatively new arrival in the diplomatic and security arena of the Middle East. Her recent dependence on foreign oil has forced her to reinterpret the Chinese political doctrine of self reliance. The reinterpretation argues that self reliance does not necessarily mean dependence on domestic production. Self reliance, as expressed by Mao Zedong, is the ability to "keep the initiative in ones own hands." Despite that, China does not consider her current dependence on Middle East oil fulfilling her rather loose definition of self reliance.

The Chinese see the Middle East as an environment dominated by the United States. There are large U.S. military commitments in Afghanistan and Iraq, a continuously strong naval presence in the Persian Gulf, and U.S. military bases in the countries of Bahrain, Saudi Arabia, Kuwait and Qatar along with substantial U.S. oil company investments throughout the region. China's view of the current Middle East political and military environment has shaped their policy to be one based on opposing U.S. hegemony in the region.²⁹ China is at a disadvantage

in that she has "neither strong historical ties nor long-standing strategic interests in the Middle East."³⁰ This is a difficult weakness to overcome when competing for influence in the region.

China's way to gain diplomatic capital in the region is by working to nullify the American influence there. The mechanism she is using to achieve this is through the support of regimes who are opposed to an American presence in the Middle East. The most visible example is Chinese support to Iran, specifically in the area of weapons technology sales. In the mid 1990's China became the leading supplier of conventional arms to Iran.³¹ They have also provided assistance on developing dual use technology that could be easily converted to develop nuclear weapons and systems designed to deliver such weapons.³² Issues about China providing nuclear weapons technology to Iran have been brewing for fifteen years or more. In 1995 China succumbed to U.S. pressure and stopped the sale of nuclear reactors to Iran. These reactors were supposedly designed to be used exclusively for power generation; however, they could easily support a nuclear weapons program.³³ From 2001 to 2003 the Director of Central Intelligence has consistently reported that China has resumed nuclear weapons technology sales to Iran.³⁴

Not only is China providing weapons of mass destruction technology to Iran, they are also helping Iran develop delivery systems technology. Numerous reports from 1995 to 2002 have surfaced about China's help with Iran's Shahab-3 and Shahab-4 medium range ballistic missiles. These missiles have a range of 800 and 1,250 miles respectively. Both are capable of hitting any state in the Middle East and the Shahab-4 could hit significant portions of Europe. Schina's delivery system support to Iran appears to be ongoing, in January of 2005 the United States imposed penalties on eight Chinese companies for exporting material that can be used to improve Iran's ballistic missile capability.

China's involvement with Iran is not a new diplomatic strategy for China. Providing nuclear technology that may be used to develop weapons, as well as ballistic missile technology to countries has been a Chinese foreign policy tool in the past. China's nuclear weapons technology exports to Pakistan followed a similar objective, to prevent either a United States or Soviet Union dominance of the subcontinent along China's southern border. As a result, Pakistan is now a nuclear power, facing the nuclear armed nation of India. Currently India and Pakistan are stable, due in no small part to the United States' considerable interest in Pakistan and their assistance in fighting Al-Qadea.

The problem with China's policy toward the middle east is that her actions to oppose what is perceived as U.S. hegemony in the region is injecting a destabilizing element into the Middle East. By providing Iran with nuclear weapons technology China will disrupt the relative balance

of power among Middle East states. By providing Iran with weapons that could be used in support of Islamic fundamentalism, the potential for ethnic or religious conflict becomes more likely. Old hatreds between Iranian and Iraqi religious groups could flare up in the future and a nuclear weapon would give Iran a strategic reserve that could allow her to act more aggressively. Israel could also be unintentionally brought into the scenario, believing that the only reason an Islamic state would want a nuclear weapon is to use it against Israel. China's objective of securing a reliable source of cheap oil is being hindered rather than helped by her weapons sales to Iran. Not only by inserting a destabilizing element into Middle East domestic affairs, but also encouraging the United States to continue her extensive military presence there to deter Iran's use of force.

CHINA AND THE SPRATLY ISLANDS

In addition to developing relationships in the Middle East, China also covets what could potentially be the largest oil reservoir in Asia, the Spratly Island oil field. Apart from the tension over the status of Taiwan, issues surrounding these islands present one of the greatest potential sources of conflict in the western pacific region.

BACKGROUND

The Spratly Islands are a group of small islands and reefs in the South China Sea, all of the islands are claimed by both China and Vietnam. The Philippines, Malaysia, Brunei and Taiwan also claim portions of the island chain.³⁸ The exact quantity of oil beneath the islands has not been determined, but proven reserves continue to grow as more exploration is conducted. Current proven reserves stand at 73 billion barrels, ten times more than China's on shore proven reserves.³⁹

China has recognized the uniqueness of the Spratlys to her national interests. Her general foreign policy concerning countries along her borders has been that stability will promote security and economic growth. The one exception to that rule has been China's aggressive policy concerning the Spratly Islands.⁴⁰ In fact, China became more confrontational in the region, especially with respect to the Philippines claim to the islands, after the United States closed it's last base in the Philippines.⁴¹ Without a United States presence in the region, China assumes it is able to openly challenge the Philippines claim to the area.

CHINESE MILITARY DOCTRINE INITIATIVES

Not only does Chinese foreign policy give special treatment to the Spratly Island region, her military is modernizing in ways that the People's Liberation Army (PLA) can be an

Instrument by which China secures this source of oil. PLA doctrine was founded on Mao Tse-Tung's writings during the Chinese civil war that occured from the 1920's to 1949. These principles are still used as the vernacular by which the PLA develops doctrine. The fundamental operational construct for army doctrine was the strategic defensive followed by the strategic offensive. The strategic defensive was further broken down into two smaller phases, the strategic retreat followed by the strategic counter-offensive. The term Mao coined for this was "active defense" or "defense for the purpose of taking the offensive and counter-attacking". This doctrine made it difficult for the PLA to conduct military planning that could be fundamentally offensive and pre-emptive. As a result all army operational plans were either defensive in nature such as defending against an attack from the USSR or the United States, or focused on the retaking of Taiwan, which they would argue is the final phase of the active defense. In all cases PLA operational planning was centered around two superpowers fighting each other.

In the mid-1980's the PLA began studying various modern wars that were limited in scope, both in the force used and the geographic area. They noted that these wars could be fought over ethnic, cultural or religious issues as well as borders and natural resources. The lessons learned from these case studies was that the PLA needed to change their basic military doctrine established in the 1930's by Mao. The new doctrine generally discounts an inevitable nuclear conflict between superpowers. The doctrine also opened the debate over what other wars would look like and how they would be prosecuted. They have generally been referred to as a "local wars" in Chinese publications. The study of local wars receives much more attention in current Chinese military journals than the traditional war between superpowers. The local war concept gave PLA doctrine, military strategy and operational concepts a very offensive flavor, to include taking the initiative and striking first.

The PLA's assessment of the future security environment speaks directly to the Spratly Island situation. It recognizes the shift from a bi-polar cold war era division of the world to a new, multi-polar world. One of the areas that Chinese military academics consider prime for conflict is the East Asian littoral.⁴⁸ PLA authors also see the fight for resources being one of the most likely motivators for future conlict.⁴⁹

Along with the PLA's new security assessment predictions, there is a change in China's policy with respect to the definition of their "strategic frontier". In the past the land boundaries and coastline have been China's working definition of the frontier which supported the active defense strategy. Textbooks in Chinese schools now refer to three million square kilometers of ocean as sovereign territory. ⁵⁰ PLA and civilian strategic thinkers also characterize the South

China Sea, coincidentally the location of the Spratly Islands, as a "strategic frontier".⁵¹ The PLA has taken these policy statements to mean that any issue in the South China Sea is an issue of sovereignty and a dispute over resources that must, necessarily, be Chinese.⁵² Furthermore, China feels it has been very restrained in the past about asserting it's authority over the area.⁵³

There is a direct link from policy to strategy in this case. China has established the South China Sea is an important interest. The Chinese military institution has changed its doctrine and military strategy to meet the stated national policy. Doctrinally, China has made the case to itself that control of the Spratly Islands is a viable national objective.

CHINESE MILITARY MODERNIZATION

China is making substantive changes to its military in order to carry out this new military strategy. The military transformation is evident in the areas of resource allocation, equipment modernization, and the development of new capabilities.

China has been increasing her defense budget at a pace that is generally in line with her Gross Domestic Product growth for the past several years. Specifically, the PLA budget grew ten percent from 2002 to 2003 and it is projected to grow another ten percent in 2004.⁵⁴ Any action to secure the Spratly Islands must necessarily involve the Peoples Liberation Army Navy (PLAN). China's Current naval capabilities are limited and there is really only one initiative, an aggressive underway replenishment ship construction program, that could provide her with additional capabilities to launch rather limited power projection operations. China has three replenishment ships capable of underway replenishment and astern refueling and she plans to double this capability by building three more before the end of the decade.55 The rest of the Chinese navy is quite small compared to her ground forces. The PLAN has a modest surface force of sixty-two destroyers and frigates with six more either being built or planned to be built. China's submarine force consists of 55 conventional patrol submarines and a handful of ballistic missile, nuclear and guided-missile submarines. Her amphibious force is relatively small as well, consisting of about 30 ocean going amphibious landing vessels each capable of carrying about 200 troops or ten armored vehicles. Notably, China also has a dedicated marine force of three brigades. China's current naval capability and new construction programs indicate China does not have a desire challenge the U.S. in a conventional fleet-on-fleet confrontation. However, she is making her existing Navy, which has no peer in the South China Sea littoral, more expeditionary by building a capability to sustain it at sea in support of small scale sea control or sea denial operations, as well as relatively small (compared to the size of her army) amphibious operations.

The PLA Air Force (PLAAF) is undergoing similar changes. Doctrinally the PLAAF is transforming from a purely defensive force to a more capable force able to conduct both offensive and defensive operations. The offensive operations are specifically geared toward "winning a 'local war under high-tech conditions'" China's Air Force is also modernizing by retiring large portions of its 1950's and 60's air fleet and reinvesting in less numerous more capable airframes composed of third generation Russian made aircraft such as the Sokhoi Su-27 and Su-30 fighters. China is also developing its own electronic warfare, warning and control systems and aerial refueling capabilities. Operationally the PLAAF has begun routine missions over international waters. Chinese military aircraft rarely flew missions beyond their coastline before the 1990's. 58

China has been putting its new military doctrine and modernization programs to practical use through a series of naval exercises. Since 1995, there have been no less than six amphibious exercises, two naval and air force combined arms exercises, one naval logistics exercise and one exercise combining both sea and airborne forces, that was termed "offensive" in nature.⁵⁹

The changes in Chinese doctrine as well as the ability to achieve local air and naval superiority over her rivals in the region give China a tool that could be used in the conquest of the Spratly Islands. A counterweight to any aggressive expansion on the part of China in Southeast Asia is the continued deterrent presence of the U.S. military, especially the U.S. Navy, in the region. China cannot, and could not in the near future (given her ship construction program), confront the U.S. Navy directly.

UNITED STATES INTERESTS

The security interests of the United States offer opportunities for cooperation with China on the security of the global oil supply. The United States security policy promotes the expansion of free markets, and economic development around the globe. The protection of free trade and free markets is most consistent with China's desires with regard to the Strait of Malacca. At the same time, U.S. security interests conflict with China's actions concerning her methods of achieving a secure source of oil. U.S. interests, such as the promotion of democracy and preventing nuclear weapons proliferation, are in conflict with China's attempts at gaining influence in the Middle East. Finally, the United States is ambivalent toward oil exploration and production development around the Spratly Islands. America advocates any conflict over maritime resource rights be governed by the International Maritime Law of the Sea. Having the issue erupt into a conflict that could potentially lead to regional instability would affect economic

prosperity by disrupting trade in the region and potentially effecting global oil prices by portending future armed conflicts over sources of oil. To that end a reliable reasonably priced source of oil is essential.

RECOMMENDATIONS

Three issues are key to Chinese foreign policy with respect to her dependence on foreign oil. The first is the security of the Strait of Malacca, the next is China's view of the United States' role in the Middle East and how China is attempting to gain influence. Finally there is the possibility that China could take unilateral action to secure more domestic oil for herself. All three issues require action on the part of the United States.

The security of the Strait of Malacca is where Chinese and United States interests coincide. An accommodation by both parties on this can be leveraged to help defuse the two issues that the United States and China disagree on with respect to oil supply security. Both the United States and China benefit from the spread of a global system of free trade, and the safe transit of shipping though the Strait of Malacca is critical. The United States, partnering with Singapore, Indonesia, and Malaysia, should invite Chinese participation in regional maritime security exercises. By demonstrating partnership, rather than a cold war capitalism-against-communism framework, the Chinese will not feel threatened by the U.S. military in the region. PLAN assets could be brought in to share the burden of security operations leading to a greater understanding of security issues between the United States, China, and other South Asian countries.

There are, potentially, two second order effects to this sort of military cooperation. Regional military to military cooperation could help defuse the Spratly Island issue by promoting closer relationships with the countries competing for the islands. Additionally, if the U.S. and China take steps towards cooperating on the security of global free trade, a culture of military cooperation instead of competition could be established which may reduce tensions in other areas such as the perceived U.S. dominance in the Middle East, and in the long term, the Taiwan issue.

China's interpretation of the United States' actions in the Middle East is leading to further destabilization of the region. This will necessarily result in more involvement and a longer and greater presence of U.S. military force in the region. Precisely what China is trying to prevent. China's aid in the development of Iran's nuclear weapons program puts her policy in direct conflict with state United States national security objectives. This fundamental misunderstanding is preventing cooperation on what should be a common interest, the continued supply of

relatively inexpensive oil to the world. Along with the indirect approach of cooperating on Malacca Strait security, the United States must take up concerted and straightforward negotiations with the Chinese with respect to dual use technology provided to Iran and any other Middle Eastern state. A Middle East that is roughly balanced in economic and military power between the various states in the region is the best way to remove the American presence. By super-empowering one Middle Eastern state with nuclear weapons, China is taking steps to de-stabilize the region and actually threatens the continued supply of cheap oil.

The forceful takeover of the Spratly Islands is the least probable scenario given the current world situation. However, it has the greatest probability of destabilizing the entire South Asia region as well as the global oil economy. The best way to prevent such an aggressive act by China is for the United States to maintain a credible deterrent force in the Western Pacific, even if the North Korean and Taiwan issues are peacefully resolved someday. A credible United States naval presence will maintain regional stability and forestall any sort of Chinese adventurism.

CONCLUSION

China's dependence on oil presents both challenges and opportunities. A secure source of oil is as important to China's national interests as it is to the United States and other industrialized nations. It would be hard to overstate Oil's importance to the current regime in China. The shared interest in the security of global trade presents opportunities for increased cooperation and understanding. China's competition with the United States in gaining influence in the Middle East is actually counter productive to her interests. Straightforward U.S. negotiations with China concerning the export of weapons technology to Iran are essential to prevent long term damage to Middle East stability and Sino/U.S. relations. Finally, the United States must maintain a credible military presence in the Western Pacific to prevent any attempts at imposing a military solution on the Spratly Island issue. Oil dependence on the part of China brings her interests more in line with the global community of capitalist states. The challenge for the United States is to emphasize how this similarity presents opportunities for cooperation while at the same time applying diplomatic pressure and maintaining deterrent forces to prevent conflict over the common need for oil.

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ENDNOTES

¹Energy Information Agency, "China Country Analysis Brief," July 2004; available from http://www.eia.doe.gov/emeu/cabs/china.html; Internet; accessed 20 November 2004.

²World Bank, "China Data Profiles," August 2004; available from http://devdata.worldbank.org/external/CPProfile.asp?SelectedCountry=CHN&CCODE=CHN&CNAME=China&PTYPE=CP>;Internet; accessed 20 November 2004.

³Energy Information Agency, "China Country Analysis Brief," July 2004; available from http://www.eia.doe.gov/emeu/cabs/china.html; Internet; accessed 20 November 2004.

⁴International Energy Agency, World Energy Outlook 2000 (Paris: OECD/IEA, 2000), 198.

⁵⁴Total mileage of China's freeway ranks 2nd in the world," *People's Daily Online* October 2004 [journal on-line]; available from http://english.people.com.cn/200410/29/eng20041029 162122.html>; Internet; accessed 20 November 2004.

⁶"Chinese Bank to Put 100 Billion Yuan into Road Construction," *People's Daily Online* August 2001 [journal on-line]; available from http://english.people.com.cn/english/200108/16/eng20010816_77416.html; Internet; accessed 21 November 2004.

⁷"China's aurto output, sales plunge in October," *People's Daily Online* November 2004 [journal on-line]; available from http://english.people.com.cn/200411/16/ eng20041116_164044.html>; Internet; accessed 22 November 2004.

⁸British Petroleum, "Statistical Review of World Energy," June 2004; available from http://www.bp.com/sectiongenericarticle.do?categoryld=2012411&contentId=2018340; Internet; accessed 22 November 2004.

⁹Energy Information Agency, "China Country Analysis Brief," July 2004; available from http://www.eia.doe.gov/emeu/cabs/china.html; Internet; accessed 22 November 2004.

¹⁰British Petroleum, "Statistical Review of World Energy," June 2004; available from http://www.bp.com/sectiongenericarticle.do?categoryId=2012411&contentId=2018340; Internet; accessed 22 November 2004.

¹¹Chu-Yuan Cheng, *Behind the Tiananmen Massacre: Social Political, and Economic Ferment in China* (Boulder, Colorado: Westview Press, 1990), 13.

¹² Philip B. Kurland and Ralph Lerner, eds., *The Founders Constitution Volume One* (Chicago: The University of Chicago Press), 575.

¹³ Stanley Rosen, "The Victory of Materialism: Aspirations to Join China's Urban Moneyed Classes and the Commercialization of Education," *The China Journal* 51 (August 2003): 34.

¹⁴ Timothy Brook, *Quelling The People* (New York: Oxford University Press), 40.

¹⁵ Ibid., 75.

- 16 Cheng, 33.
- ¹⁷ Yanli Wang, Nicholas Rees and Bernadette Andreosso-O'Callaghan, "Economic Change and Political Development in China: findings from a public opinion survey," *Journal of Contemporary China* 13(39) (May 2004): 212.
 - ¹⁸ International Energy Agency, 189.
 - ¹⁹ International Energy Agency, 200.
- ²⁰ John H. Noer and David Gregory, *Chokepoints: Maritime Economic Concerns in Southeast Asia* (Washington, D.C.: National Defense University Press, 1996), 9.
 - ²¹ Ibid., 79.
- ²² Colin L Powell, "Patterns of Global Terrorism," April 2003, available from http://www.state.gov/s/ct/rls/pgtrpt/2002/html/19983.htm; Internet: accessed 06 October 2004.
- ²³ Associated Press "Recent Terrorist Attacks in Indonesia," 9 September 2004, available from from http://abcnews.go.com/wire/World/ap20040909_368.html; internet; accessed 24 September 2004.
- ²⁴ Michael Richardson, "Singapore welcomes US aircraft carrier," *International Herald Tribune*, 22 March 2001; available from http://www.singapore-window.org/sw01/010322ih.htm; Internet; accessed 5 February 2005.
- ²⁵ David M. Finkelstein, "China's New Concept of Security Retrospectives & Prospects," 30 October 2001; available from http://www.ndu.edu/inss/China_Center/PLA_Conf_Oct01/MFinkelstein.htm; Internet; accessed 09 January 2005.
- ²⁶ Willy Lam, "Beijing's Reaction to East Asia's Changing Alliances," *China Brief* IV, Issue 15 (22 July 2004): 2.
- Mokhzani Zubir, "The strategic value of the Strait of Malacca," 2004; available from <www.mima.gov.my/mima/htmls/ papers/pdf/mokhzani/strategic-value.pdf>; Internet; accessed 09 January 2005.
- ²⁸ Kenneth Lieberthal, *Governing China* (New York: W. W. Norton & Company, 1995), 76.
- ²⁹ Deng-ker Lee, "Peking's Middle East Policy in the Post-Cold War Era," *Issues & Studies: A Journal of Chinese Studies and International Affairs* 30, no. 8 (August 1994): 87.
- ³⁰ Barry Rubin, "China's Middle East Strategy," in *China and the Middle East*, ed. P. R. Kumaraswamy, (New Delhi: Sage Publications, 1999), 108.
- ³¹ Kenneth Kaztman, *Iran: Arms and Technology Acquisitions*, Congressional Research Service Report for Congress 97-474F (Washington, D.C.: The Library of Congress, 1998), 3.

- ³² Ibid., 4.
- ³³ Shirley A Kan, *China and Proliferation of Weapons of Mass Destruction and Missiles: Policy Issues*, Congressional Research Service Report for Congress RL31555 (Washington, D.C.: The Library of Congress, 2003), 7.
 - 34 Ibid., 9.
 - 35 Ibid.
- ³⁶ David E. Sanger, "U.S. Is Punishing 8 Chinese Firms For Aiding Iran," *New York Times*, 18 January 2005, sec. I, p. 1.
- ³⁷ Ashok Kapur, "China and Proliferation: Implications for India," in *China and the Middle East*, ed. P. R. Kumaraswamy, (New Delhi: Sage Publications, 1999), 175.
- ³⁸ Central Intelligence Agency, "CIA World Fact Book: Spratly Islands," 30 November 2004; available from http://www.cia.gov/cia/publications/factbook/geos/pg.html, internet; accessed 14 December 2004.
- ³⁹ Haijiang Henry Wang, *China's Oil Industry and Market* (Amsterdam: Elsevier, 1999), 30.
- ⁴⁰ H Lyman Miller and Liu Xiaohong, "The Foreign Policy Outlook of China's 'Third Generation' Elite," in *The Making of Chinese Foreign and Security Policy in the Era of Reform*, ed. David M. Lampton (Stanford: Stanford University Press, 2001) 141.
 - ⁴¹ H. H. Wang, 29.
- ⁴² Paul H. B. Godwin, "Change and Continuity in Chinese Military Doctrine," in *Chinese Warfighting: The PLA Experience since 1949*, ed. Mark A. Ryan, David M. Finkelstein, and Michael A. McDevitt (Armonk, New York: M. E. Sharpe, 2003) 25.
- ⁴³ Mao Tse-Tung, "Strategy in China's Revolutionary War," in *Selected Military Writings of Mao Tse-Tung* (Peking: Foreign Languages Press, 1967), 111.
 - ⁴⁴ Ibid., 105.
- ⁴⁵ David Shambaugh, *Modernizing China's Military; Progress, Problems and Prospects*. (Berkeley: University of California Press, 2002), 64.
- ⁴⁶ Michael Pillsbury, *China Debates the Future Security Environment* (Washington, D.C.: National Defense University Press, 2000), 262.
 - ⁴⁷ Shambaugh, 65.
 - 48 Pillsbury, 259.
 - 49 Ibid., 260.
 - 50 Shambaugh, 67.

- ⁵¹ Ibid.
- ⁵² Ibid., 304.
- ⁵³ Allen Carson, "Constructing the Dragon's Scales," *Journal of Contemporary China*. 12 (37) (November 2003): 698.
- ⁵⁴ International Institute for Strategic Studies. "The Military Balance: 2004-2005," 2004; available from http3.oup.co.uk/milbal/current/pdf/104318.pdf; Internet; accessed 15 December 2004.
- ⁵⁵ Stephen Saunders, ed., Jane's Fighting Ships 2001-2002, (Coulsdon, U.K.: Jane's Information Group, 2001), 112.
- ⁵⁶ "PLA Air Force to switch its defensive posture," *People's Daily Online* (15 November 2004); available from http://english.people.com.cn/200411/15/eng20041115_163994.html; Internet; accessed 24 January 2005.
- ⁵⁷ China Defense Today, "The Peoples Liberation Army Air Force (PLAAF)," 2005; available from http://www.sinodefence.com/airforce/default.asp; Internet; accessed 24 January 2005.
- ⁵⁸ Ken Allen, "PLA Air Force Organization," in The People's Liberation Army as Organization: Reference volume 1.0, ed. James C. Mulvenon and Andrew N. D. Yang, (RAND Corporation, 2002); available from < http://www.rand.org/publications/CF/CF182/>; Internet; accessed 24 January 2005, 370.
- ⁵⁹ Srikanth Kondapalli, "China's Naval Training Program," *Strategic Analysis: A Monthly Journal of the IDSA* XXIII No. 8 November 1999 [journal on-line]; available from < http://www.ciaonet.org/olj/sa/sa_99kos03.html#note*>; Internet; accessed 5 February 2005.

BIBLIOGRAPHY

- Allen, Ken. "PLA Air Force Organization." in *The People's Liberation Army as Organization:*Reference volume 1.0, ed. James C. Mulvenon and Andrew N. D. Yang, 346-457. RAND
 Corporation, 2002. Available from http://www.rand.org/publications/CF/CF182/.

 Internet. Accessed 24 January 2005,
- Associated Press. "Recent Terrorist Attacks in Indonesia", 9 September 2004. Available from http://abcnews.go.com/wire/World/ap20040909_368.html. Internet. Accessed 24 September 2004.
- British Petroleum. "Statistical Review of World Energy." June 2004. Available from http://www.bp.com/sectiongenericarticle.do?categoryId=2012411&contentId=2018340. Internet. Accessed 22 November 2004.
- Brook, Timothy. Quelling The People. New York: Oxford University Press, 1992.
- Carlson, Allen. "Constructing the Dragon's Scales." *Journal of Contemporary China*. 12 (37) (November 2003): 677-698.
- Central Intelligence Agency. "CIA World Fact Book: Spratly Islands." 30 November 2004.

 Available from http://www.cia.gov/cia/publications/factbook/geos/pg.htmb. Internet.

 Accessed 14 December 2004.
- Cheng, Chu-Yuan, *Behind the Tieananmen Massacre: Social Political, and Economic Ferment in China*. Boulder, Colorado: Westview Press, 1990.
- China Defense Today. "The Peoples Liberation Army Air Force (PLAAF)." 2005. Available from http://www.sinodefence.com/airforce/default.asp. Internet. Accessed 24 January 2005.
- "China's auto output, sales plunge in October." *Peoples Daily Online* November 16, 2004. Journal on-line. Available from http://english.people.com.cn/200411/16/eng20041116_164044.html. Internet. Accessed 22 November 2004.
- "Chinese Bank to Put 100 Billion Yuan into Road Construction." *People's Daily Online* August 16, 2001. Journal on-line. Available from http://english.people.com.cn/english/200108/16/eng20010816_77416.html. Internet. Accessed 21 November 2004.
- Energy Information Agency. "China Country Analysis Brief." July 2004. Available from http://www.eia.doe.gov/emeu/cabs/china.html. Internet. Accessed 20 November 2004.
- Finkelstein, David M. "China's New Concept of Security Retrospectives & Prospects." 30 October 2001. Available from http://www.ndu.edu/inss/China_Center/PLA Conf Oct01/MFinkelstein.htm>. Internet. Accessed 09 January 2005.
- Godwin, Paul H.B. "Change and Continuity in Chinese Military Doctrine." In *Chinese Warfighting: The PLA Experience since 1949*, ed. Mark A. Ryan, David M. Finkelstein, and Michael A. McDevitt, 23-55. Armonk, New York: M. E. Sharpe, 2003.
- International Energy Agency. World Energy Outlook 2000. Paris: OECD/IEA, 2000.

- International Institute for Strategic Studies. "The Military Balance: 2004-2005." 2004. Available from http3.oup.co.uk/milbal/current/pdf/104318.pdf>. Internet. Accessed 15 December 2004.
- Kan, Shirley, A. China and Proliferation of Weapons of Mass Destruction and Missiles: Policy Issues. Congressional Research Service Report for Congress RL31555. Washington, D.C.: The Library of Congress, 2003.
- Kapur, Ashok. "China and Proliferation: Implications for India." In *China and the Middle East*, ed. P. R. Kumaraswamy, 108-116. New Delhi: Sage Publications, 1999.
- Katzman, Kenneth. *Iran: Arms and Technology Acquisitions*. Congressional Research Service Report for Congress 97-474F. Washington, D.C.: The Library of Congress, 1998.
- Kondapalli, Srikanth. "China's Naval Training Program." Strategic Analysis: A Monthly Journal of the IDSA XXIII No. 8 November 1999. Journal on-line. Available from http://www.ciaonet.org/oli/sa/sa 99kos03.html#note*>. Internet. Accessed 5 February 2005.
- Kurland, Philip B., and Ralph Lerner, eds. *The Founders Constitution Volume One*. Chicago: The University of Chicago Press, 1987.
- Lam, Willy. "Beijing's Reaction to East Asia's Changing Alliances." *China Brief* IV, Issue 15 (22 July 2004): 1-3.
- Lee, Deng-ker. "Peking's Middle East Policy in the Post-Cold War Era." *Issues & Studies: A Journal of Chinese Studies and International Affairs* 30, no. 8 (August 1994): 69-94.
- Lieberthal, Kenneth. Governing China. New York: W. W. Norton & Company, 1995.
- Miller, H. Lyman and Liu Xiaohong. "The Foreign Policy Outlook of China's 'Third Generation' Elite." In *The Making of Chinese Foreign and Security Policy in the Era of Reform*. Ed. David M. Lampton, 123-150. Stanford: Stanford University Press, 2001.
- Noer, John H. and David Gregory. *Chokepoints: Maritime Economic Concerns in Southeast Asia.* Washington, D.C.: National Defense University Press, 1996.
- Pillsbury, Michael. *China Debates the Future Security Environment*. Washington, D.C.: National Defense University Press, 2000.
- "PLA Air Force to switch its defensive posture." *People's Daily Online* (15 November 2004). available from http://English.people.com.cn/200411/15/eng20041115_163994.html. Internet. Accessed 24 January 2005.
- Powell, Colin L. *Patterns of Global Terrorism*. Washington D.C., State Department. April 2003. Available from http://www.state.gov/s/ct/rls/pgtrpt/2002/>. Internet. Accessed 25 September 2005.
- Richardson, Michael. "Singapore welcomes US aircraft carrier." *International Herald Tribune*, 22 March 2001. Available from http://www.singapore-window.org/sw01/010322ih.htm. Internet. Accessed 5 February 2005.

- Rosen, Stanley. "The Victory of Materialism: Aspirations to Join China's Urban Moneyed Classes and the Commercialization of Education." *The China Journal* 51 (August 2003):
- Rubin, Barry. "China's Middle East Strategy." In *China and the Middle East*, ed. P. R. Kumaraswamy, 108-116. New Delhi: Sage Publications, 1999.
- Sanger, David E. "U.S. Is Punishing 8 Chinese Firms For Aiding Iran." *New York Times*, 18 January 2005, sec. I, p. 1.
- Saunders, Stephen, ed. Jane's Fighting Ships 2001-2002. Coulsdon, U.K.: Jane's Information Group, 2001.
- Shambaugh, David. *Modernizing China's Military; Progress, Problems and Prospects*. Berkeley: University of California Press, 2002.
- "Total mileage of China's freeway ranks 2nd in the world." *People's Daily Online* October 29, 2004. Journal on-line. Available from http://english.people.com.cn/200410/29/eng20041029_162122.html. Internet. Accessed 20 November 2004.
- Tse-Tung, Mao "Strategy in China's Revolutionary War." In Selected Military Writings of Mao Tse-Tung. Peking: Foreign Languages Press, 1967.
- U.S. Department of Energy. "Energy efficiency and Renewable Energy Fact #315: April 12, 2004 China Passenger Car sales
- Wang, Haijiang Henry. China's Oil Industry and Market, Amsterdam: Elsevier, 1999.
- Wang, Yanli, Nicholas Rees and Bernadette Andreosso-O'Callaghan. "Economic Change and Political Development in China: findings from a public opinion survey." *Journal of Contemporary China* 13(39) (May 2004): 203-222.
- World Bank. "China Data Profiles." August 2004. Available from https://devdata.worldbank.org/external/CPProfile.asp?SelectedCountry=CHN&CCODE=CHN&CNAME=China&PTYPE=CP>. Internet. Accessed 20 November 2004.
- Zubir, Mokhzani. "The strategic value of the Strait of Malacca." 2004. Available from www.mima.gov.my/mima/htmls/ papers/pdf/mokhzani/strategic-value.pdf>. Internet. Accessed 09 January 2005.